We claim:

1. An interface system for monitoring passive electrodes and driving active electrodes on an endocardial mapping catheter, the interface system comprising:
   a) a passive electrode interface adapted to monitor the passive electrodes;
   b) an active electrode interface adapted to drive the active electrodes;
   c) a computer interface adapted to allow computer monitoring of the passive electrodes and driving of the active electrodes.
   d) a signal generator controlled by the computer interface, the signal generator electrically connected to the active electrode interface.
2. The interface system of claim 1, further comprising:
   e) a surface electrode interface adapted for electrical connection to surface electrodes; and
3. The interface system of claim 2, wherein the signal generator is further electrically connected to the surface electrode interface.
4. The interface system of claim 3, further comprising
   f) a therapy catheter interface adapted to electrically connect to electrodes on a therapy catheter.
5. The interface system of claim 4, wherein the therapy catheter interface is electrically connected to the computer interface through a signal conditioner.
6. The interface system of claim 4, wherein the therapy catheter interface further comprises a locator electrode interface, and the signal generator is electrically connected to the locator electrode interface.

7. The interface system of claim 4, further comprising:

g) an ECG subsystem in communication with the computer interface and the surface electrode interface.

8. The interface system of claim 1, further comprising

e) a therapy catheter interface adapted to electrically connect to electrodes on a therapy catheter.

9. The interface system of claim 8, wherein the therapy catheter interface further comprises a therapy electrode interface for delivering ablation energy to the therapy catheter.

10. The interface system of claim 9, wherein the passive electrode interface further comprises a signal conditioner having a high pass section and a low pass section.

11. The interface system of claim 6, wherein the passive electrode interface further comprises a signal conditioner having a high pass section and a low pass section.